

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

Title V (proposed/final permit) No. G-99-001
GENERAL PERMIT
FOR
NATURAL GAS TRANSMISSION STATIONS AND PROCESSING PLANTS

April 27, 2000
JOHN T. FLOYD, REVIEWER

COMMENTS:

The Draft General Permit was public noticed statewide the week of December 1, 1997 in the newspaper with the largest circulation in each county containing one or more of these sources. Comments were received from the sources included in this permit and the United States Environmental Protection Agency. The comments, along with responses from the Division for Air Quality, are included with this Statement of Basis.

US EPA COMMENTS - Amy Williams August 8, 1997

1. Page 4, Section B, Compliance Demonstration Method: Rewording the sentence reading, "Compliance to the ... standard," may be more clear as, "Compliance with the ... standard."

Response: This comment has been incorporated into the permit.

2. Pages 4, 5, and 7, Section B, Compliance Demonstration Method: Please specify the emission factor to be used to demonstrate compliance. Also, please specify the equation which will be used to demonstrate compliance using fuel usage and emission factor information for both particulate matter and sulfur dioxide emissions.

Response: The emission factors for natural gas combustion will be obtained from GRI Topical Report, "Measurement of Air Toxic Emissions from Natural Gas-Fired Internal Combustion Engines at Natural Gas Transmission and Storage Facilities," February 1996, Section 6 Tables that correspond to the appropriate engine.

lb	mmBtu	1000 Btu	scf
mmBtu	1,000,000 Btu	Scf	

3. Section B: Will there be any Operating limitations specific to individual facilities set forth in the permit application?

Response: No.

US EPA COMMENTS - Continued

4. Page 11, Section B, No. 1, Operating Limitations: The wording of the first sentence is confusing. The fuel must have a sulfur content less than or equivalent to 0.8 percent by weight, and the flue gas must have a sulfur dioxide content less than 0.015 percent by volume at 15 percent oxygen on a dry basis. Two sentences describing these requirements may make this clearer.

Response: This comment has been incorporated into the permit.

5. Page 12, Section B, No. 3, Testing Requirements, Second Bullet: Typographical error. Change "point" to "points."

Response: This comment has been incorporated into the permit.

6. Page 12, Section B, No. 3, Testing Requirements, Fourth Bullet: To make this requirement very clear, perhaps change the sentence reading, "the sulfur content shall be measured using..." to "the sulfur content of gaseous fuels shall be measured using..."

Response: This comment has been incorporated into the permit.

7. Page 12, Section B, No. 4, Specific Monitoring Requirements, Second Bullet: This sentence discusses monitoring requirements if a water injection system is used to control NO_x emissions. It should be made clear that if a facility is not using a water injection system, it must come up with a plan that specifies what type of monitoring will take place in the permit application. The permit should reference this requirement.

Response: This comment has been incorporated into the permit.

8. Page 17, Section B, No. 1: This condition indicates that the amount of natural gas burned shall be recorded on a monthly basis. For certain sources commencing operation on or after June 9, 1989 (see Page 8), records of natural gas burned must be recorded on a daily basis, instead of a monthly basis. Perhaps adding a sentence to Condition No. 1 on Page 17 to indicate this requirement would prevent confusion for facilities required to record on a daily basis.

Response: This comment has been incorporated into the permit.

9. Page 15, Insignificant Activities: Metal degreasers are included in the list of insignificant activities. It should be noted that there is a MACT standard for halogenated solvent cleaning (Part 63, Subpart T), and if this applies, the unit cannot be considered an insignificant activity.

Response: The Insignificant Activities list has been amended to exclude metal degreasers that are required to meet MACT standard.

10. Page 8, Section B, No. 5, Specific Record Keeping Requirements, fourth sentence: To ensure that records required by the Division for Air Quality will be retained at the source, the phrase, "or where records are kept" should be deleted. Natural Gas Transmission Stations can vary in terms of staffing and suitable locations for record storage. Since the permit explicitly states that records "shall be made available for inspection upon request," the Division feels that the record keeping requirements are sufficient to ensure compliance.

US EPA COMMENTS - Continued

11. Page 14, After the heading entitled, "Applicable Regulations," the following sentence was left out. "There are no applicable federally enforceable regulations."

Response: This comment has been incorporated into the permit.

12. Page 15, Section C, Insignificant Activities: Please explain the basis for determining that units are insignificant emission units in a Statement of Basis.

Response: Kentucky uses a self certification by the source that the activity meets the criteria for insignificant activities. It is part of the application and does not need to be addressed in the statement of basis.

13. Page 16, Section D, No. 1, second sentence: To ensure that the source does not have broad control over control equipment conditions, change the word "acceptable" to "practicable."

Response: This comment has been incorporated into the permit.

14. Page 18, Section E, No.6: This condition is not clear unless the regulation cited is examined. To elaborate on this condition, at a minimum, this paragraph could refer to the required Emissions Statement Certification.

Response: This condition has been replaced as the boiler plate general conditions, have been restructure and is not longer in the permit.

US EPA COMMENTS - Amy Williams - January 7, 1998

1. Statement of Basis: No Statement of Basis was provided with the permit. As required by 40 CFR 70.7(a)(5), KDAQ must provide a statement that sets forth the legal and factual basis for the permit conditions, including references to the applicable statutory or regulatory provisions. Recommended items for inclusion in the statement of basis include: (1) descriptions of the facility, processes, and emission units; (2) justification for streamlining of any applicable requirements; and (3) notification to the source or the public about issues of concern.

Response: A copy of the Statement of Basis was provided to EPA.

2. Compliance Demonstration with Particulate Standard: Pages 4, 5, and 7, Section B, Emission Units 01, 02, and 03 (Natural Gas Fired Indirect Heat Exchanger Units), Compliance Demonstration Method: Permit Condition 2 states, "Compliance with the particulate matter allowable standard shall be demonstrated by calculating particulate matter emissions using fuel usage rate and emission factor information." The permit should specify the formula which will be used to calculate emissions and the specific emission factors that will be used to demonstrate compliance. Additionally, the permit should specify either a limit on fuel usage rate or a frequency of record keeping to demonstrate continuous compliance with the particulate standard.

Response: This comment has not been incorporated into the permit, the current condition ensures compliance with the standard.

3. Compliance Demonstration with Sulfur Dioxide Standard: Pages 4, 5, and 7, Section B, Emission Units 01, 02, and 03 (Natural Gas Fired Indirect Heat Exchanger Units), Compliance Demonstration Method: Permit Condition 2 states, "Compliance with the sulfur dioxide allowable standard shall be demonstrated by calculating sulfur dioxide emissions using fuel usage rate and emission factor information." The permit should specify the formula which will be used to calculate emissions and the specific emission factors that will be used to demonstrate compliance. Additionally, the permit should specify either a limit on fuel usage rate or a frequency of record keeping to demonstrate continuous compliance with the sulfur dioxide standard.

Response: This comment has not been incorporated into the permit, the current condition ensures compliance with the standard.

4. Monitoring, Record Keeping and Recording: On Page 4 (Emission Unit 01) and Page 6 (Emission Unit 02), Conditions 5 and 6 (Specific Record Keeping Requirements and Specific Reporting Requirements) refer to requirements in Section E (Conditions 1 and 6). Conditions E.1 and E.6 require the source to burn only natural gas, keep natural gas records, and report emissions information annually. On Page 8 (Emission Unit 03), Conditions 4, 5 and 6 (monitoring, record keeping, and reporting requirements) require the permittee to keep records of the source's annual natural gas processing rate, as well as records of any necessary changes in equipment or operation; reference is made to Section E.6 (which requires the permittee to report emissions information annually). These monitoring, record keeping, and reporting requirements are not adequate to demonstrate compliance with the particulate matter, sulfur dioxide, and opacity standards on a continuous basis.

Response: This comment has been incorporated into the permit.

5. Periodic Monitoring for Opacity: Pages 4, 5, and 7, Section B, Compliance Demonstration Method, Condition 2 (Emission Units 01, 02, and 03): The permit requires one Method 9 measurement to be conducted annually to determine compliance with the opacity standard. Conducting one opacity measurement per year using EPA Reference Method 9 will not demonstrate continuous compliance with the opacity standard. Please refer to the Region 7 Periodic Monitoring for Opacity Guidance, and rewrite this condition.

NOTE: Natural gas combustion rarely results in violations of the opacity standard, therefore, EPA has withdrawn this comment.

6. Testing Requirements: Page 6, Section B (Emission Unit 04): Condition 3, reads, "Pursuant to Section 8, compliance shall be demonstrated by reference methods contained in 40 CFR 60 Appendix A except as provided in State Regulation 401 KAR 50:045." This condition is unclear. In which cases will testing be conducted to demonstrate compliance? Which test methods? Also, where is Section 8?

Response: This comment has been incorporated into the permit, the condition has been clarified for Emission Points 02 and 03.

7. Applicable Regulations: Page 9, Section B (Emission 04): This section states, "There are no applicable federally enforceable regulations." If only state provisions apply, this sentence should be reworded as "no federally enforceable requirements."

Response: This comment has been incorporated into the permit.

8. Compliance Demonstration: Pages 11 and 12, Section B, Conditions 2, 3, 4, 5, and 6: The frequency for testing fuel concentrations and the gaseous concentration is not specified in the permit. Additionally, the frequency for calculating NO_x emissions to demonstrate compliance with the NO_x standard is not specified in the permit. These frequencies should be added to the permit.

Response: This comment has been incorporated into the permit.

9. Specific Record Keeping Requirements: Page 12, Condition 5: The permit does not specify how long records need to be maintained.

Response: All conditions specifying record keeping now reference Section F.2.

10. Specific Reporting Requirements: Page 13, Section B (Emission Unit 06), Condition 6: As written, this condition is a statement, not a requirement. The condition should be reworded to make this information a requirement {e.g., "Reports for exceedences of operation ... times will be kept in accordance with/pursuant to 40 CFR 60.334(c)}.

Response: This comment has been incorporated into the permit.

11. Operating Limitations: Page 15, Section B, Condition 1, Compliance demonstration Method (Unit 08): Monitoring frequency is not specified in the permit. Additionally, Attachment F, referenced in this Condition, does not specify a monitoring frequency.

Response: This comment has been incorporated into the permit.

12. Operating Limitations: Page 17, Section B (Emission Unit 09, Storage Vessels for Petroleum Liquids), Condition 1: For units with a storage capacity greater than 40,000 gallons, the permit states, "See 401 KAR 61:050, Section 3, Standards for (Hgt) and Section 4, Operating Requirements." Similarly, Condition 4 references the same regulation for monitoring of operations. Also, on Page 19 (Emission Unit 10), Condition 3, Testing Requirements, and Condition 4, Specific Monitoring Requirements, the permit reads, "See Regulation 401 KAR 59:050..." These conditions, as stated, do not require the source to conduct testing and monitoring. Instead, the conditions refer the permittee to a regulation. The permit should specify that the permittee is required to comply with a particular regulation. Furthermore, the permit should specifically list the required operating limitations.

Response: This comment has been incorporated into the permit.

13. Specific Record Keeping Requirements: On Pages 17 and 18, Section B, Unit 09 (Storage Vessels for Petroleum Liquids), Condition 5 does not specify a time frame or frequency for recording vapor pressures. This should be added to the permit.

Response: This comment has been incorporated into the permit.

14. Specific Record Keeping Requirements: On Page 18, for units with a storage capacity greater than 40,000 gallons, Condition 5 states, "Records shall be kept so that compliance can be demonstrated with the applicable requirements in Regulation 401 KAR 61:050." This condition should be reworded with more specificity. It does not specify what type of records should be kept, nor does it specify a frequency.

Response: This comment has been incorporated into the permit.

15. Testing Requirements: Page 19, Section B, Emission Unit 10, Storage Vessels for Petroleum Liquids, Condition 3: For storage tanks with a volume greater than 40,000 gallons (commenced after April 9, 1972, and prior to July 24 1984) the permit does not specify requirements for the source; Regulation 401 KAR 59:050, Section 6 is referenced. Specific applicable requirements should be specified in the permit. Similarly, Condition 4 also references 401 KAR 59:050 without specifically requiring the source to comply with applicable requirements.

Response: This comment has been incorporated into the permit.

16. Compliance Certification Requirements: Pages 18 and 20, Section B (Emission Units 09 and 10): Condition 11 indicates that certifying compliance is not applicable. This condition should reference the annual compliance certification requirements in Section E, Condition 5.

Response: This comment has been incorporated into the permit.

17. Specific Monitoring Requirements and Specific Record Keeping Requirements: Page 20, Section B, Emission Unit 10, Conditions 4 and 5: The frequency of monitoring and recording is not specified in the permit.

Response: This comment has been incorporated into the permit.

18. Insignificant Activities: Page 22, Section C: The basis for considering these activities as insignificant should be explained (preferably in a statement of basis). The "leaking pipeline" identified as an insignificant activity probably should not be classified as insignificant; leaks are not planned and can be very significant.

Response: This comment has been incorporated into the permit.

19. Monitoring, Record Keeping, and Reporting Requirements: Page 23, Section E: This section contains no requirement for the source to keep records of calculated particulate matter or sulfur dioxide emissions using fuel usage rate and emission factor information.

Response: The source is required to "provide the Division with all information necessary to determine its subject emissions" by Section F.8.

20. Attachments C, D, and E: Page 21: Each facility regulated under the general permit should list the particular requirements specified in Attachments D and E that apply to each facility regulated under this general permit.

Response: Given the basic premise of the General Permit to cover multiple sources under one permit, the "particular requirements specified in Attachments D and E that apply to each facility regulated" will not be listed in this permit.

- 21 . Summary of Source Specific Applicable Requirements and Emission Points: Attachment C: Will each individual facility regulated under this general permit complete the chart based on site-specific information and summarize which standards apply?

Response: Attachment C: Summary of Source Specific Applicable Requirements and Emission Points is a guide to assist individual facilities when assessing how the general permit applies to them. The completion of Attachment C is strictly optional. Each source will be provided a copy of the emission inventory for their sites.

SOURCE COMMENTS

SOURCE COMMENTS - COLUMBIA GAS - P. M. Hoffman - September 17, 1997

1. The draft permit requires the use of a full analysis to demonstrate compliance with sulfur dioxide emissions limitations, however, the frequency of analysis is not specified. Columbia requests that the requirement specify annual fuel analysis to demonstrate compliance.

Response: The Division retains the authority to specify fuel analysis frequency to ensure compliance but concurs that annual fuel analysis should be sufficient in most cases.

2. **SECTION C. INSIGNIFICANT ACTIVITIES (PAGE 15)**: Each of Columbia's Stations contain liquid storage tanks for lubricant oils and pipeline liquids, and several of the stations have small (<5000 gallon, non-NSPS) gasoline and diesel storage tanks. These tanks were identified as insignificant in the Title V applications per the instructions on Form 7007DD. However, the list of insignificant activities in Section C of the Draft General Permit does not include these units. Columbia requests that these types of tanks be added to the list of insignificant activities in the Draft General Permit.

Response: This activity has been added to the list in Section C.

3. **SECTION E. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (PAGE 16) - Condition 1**: The general permit requires that each station "maintain all records of any changes in equipment or operation." Without a definition of "changes in equipment or operation," the requirements of this section could be interpreted in a way that will impose a tremendous record keeping and reporting burden on the facility. For example, taking one of the engines off-line temporarily for routine maintenance, or replacing the spark plugs on an engine would require record keeping, annual report submittal to KDEP, and record storage for 5 years, if these actions are viewed as changes in equipment or operation.

Columbia suggests adding the following text (indicated in **bold**) to Condition 1:

Furthermore, the permittee shall maintain all records of any changes in equipment or operation **that result in or have the potential to result in changes in emissions of regulated air pollutants, or subject the facility to additional significant applicable requirements.**

Response: This comment was not incorporated into the permit. However, it is not the intent of the Division to require record keeping or reporting for changes in equipment or operation that do not or do not have the potential for subjecting the source to additional requirements.

4. In 1991, a natural gas liquids extraction facility was constructed at the existing compressor station. During preparation of the Title V application, Columbia determined that the station was subject to 40 CFR 60.630-636 (NSPS Sub part KKK), as incorporated in 401 KAR 60:630. The applicable record keeping, reporting, monitoring, and operation requirements were summarized in the Title V application for the station on Form DEP7007V and in Appendix B. As it is written, the Draft General Permit does not address this regulation. Columbia is requesting that an additional part be added to Section B of the General Permits to address the applicable requirements for natural gas liquids extraction.

Response: 40 CFR 60 Subpart KKK and Subpart LLL have been incorporated into the permit as potential applicable requirements.

SOURCE COMMENTS - COLUMBIA GAS - P. M. Hoffman - December 19, 1997

1. Columbia requests that the wording of the third sentence be revised as follows (our proposed insert is underlined):

Furthermore, for significant points of emission the permittee shall maintain all records of any changes in equipment or operation that result in or have the potential to result in changes in emissions of regulated air pollutants.

The objective of this change is to clarify the scope of records to be maintained. As originally worded, this sentence could be interpreted to require any change to be documented (e.g., routine maintenance activities such as changes in lubricating oil or spark plugs) regardless of whether these changes have any impact on emissions potential. Columbia believes the requested change is consistent with KDEP's air quality objectives, while avoiding excessive record keeping requirements.

Response: Refer to response to Columbia Gas Comment 3 September 17, 1997.

2. Columbia requests that the fifth sentence be deleted. The fourth sentence of Condition 1 requires that these records be retained on site for five years and that they be available for inspection upon request; Columbia has no objection to this requirement. However, Columbia believes the annual submittal of these records, especially in light of the ambiguous scope of the third sentence (addressed in Comment 1, above), will impose a significant and unnecessary burden on both Columbia and KDEP. Conditions 4 and 5 of Section E already require the permittee to submit as-needed deviation reports and annual compliance certification reports to KDEP. Columbia believes that Conditions 4 and 5 are sufficient to document compliance with the permit, and that submittal of operating and maintenance records as indicated by Condition 1 is both unnecessary and burdensome.

Response: Refer to response above.

SOURCE COMMENTS - TEXAS GAS TRANSMISSION - Stuart Latham - December 23, 1997

1. The general permit does not currently cover three IC engines at the Slaughters station that deliver primary electrical power to the station. The engines are too large to qualify as insignificant activities per Section C(4) of the permit are not covered in Section B[4] since they are not standby generators. Changing the wording in Section B[4] to state "Natural Gas Fired Electrical Generators (Standby or Primary)" would eliminate this problem.

Response: These units are addressed in Section C.

2. Texas Gas is requesting federally-enforceable operating restrictions for two of the Kentucky stations. The proposed restrictions are for Midland II and Midland III and require operation of their thermal oxidizers when the glycol dehydrators are operating (with an allowance for maintenance downtime). These restrictions were proposed to limit the potential to emit of the dehydrators below major source levels. Texas Gas is requesting that these restrictions be incorporated into the general permit. Attachment 1 provides proposed language to be included in the general permit to address these situations.

Response: This comment was not addressed in the permit.

3. After submittal of our Title V application, Texas Gas submitted a permit application to DAQ to replace compressor engines at the Slaughters Compressor Station. A construction permit for the project was issued on September 23, 1997. It does not appear that this project will directly affect any of the information in the general permit; however, we thought that you should be updated on the status of this parallel permitting action. Additionally, Texas Gas is no longer requesting operating restrictions for any of the engines at Slaughters.

Response: This comment does not require response.

SOURCE COMMENTS - TEXAS GAS TRANSMISSION - Stuart Latham - September 22, 1997

1. Texas Gas was initially surprised to find the air toxics regulations (401) KAR 63:021 and 63:022) cited as applicable requirements in the draft general permit due to the definition of "applicable requirement" found in 401 KAR 50:035, Section 1(7). In subsequent telephone conversations, you informed us that the Division has determined that compressor stations large enough to be a Title V major source probably emit air toxics in quantities above the adjusted significant levels, requiring implementation of RACT or BACT. Further, Texas Gas has not previously examined this issue and is willing to accept the Division's determination. Texas Gas agrees with the Division's definition of RACT and BACT found in the draft general permit for engines, turbines, and glycol dehydrators. We believe that following a routine operation and maintenance program will ensure proper operation of these emission sources and achieve the goals of the Division.

Response: This comment does not require response.

2. After submittal of our Title V application, Texas Gas submitted a permit application to KY DAQ to replace compressor engines at our Slaughters Compressor Station. Recent telephone discussions with Muhammad Rahman of the Division indicate that a draft construction permit should be issued for this project within the next two weeks. It does not appear that this project will directly affect any of the information in the general permit; however, we thought that you should be aware of this parallel permitting action.

Response: This comment does not require response.

3. There are three types of emission sources at Texas Gas' Kentucky compressor stations that are not specifically addressed in the draft general permit. First, there are IC engines at our Slaughters station that are used to delivering primary electrical power to the station. These engines are too large to qualify as insignificant activities per Section C(4) of the permit and are not covered in Section B[4] to state "Natural Gas Fired Electrical Generators (Standby or Primary)' would eliminate this problem. The second type of emission point not covered is auxiliary air compressors, which are present at several of our Kentucky stations. As shown in our Title V applications, these engines qualify as insignificant activities and should be listed as such in the general permit. Finally, all of our stations have storage tanks used to store various liquids ranging from lubricating oils to pipeline distillate. These storage tanks should also be listed in Section C of the general permit as insignificant activities.

Response: These units are all addressed in the permit.

4. Texas Gas proposed federally-enforceable operating restrictions in the Title V applications for three of our Kentucky stations. The proposed operational restrictions for Midland II and Midland III require operation of their thermal oxidizers whenever the glycol dehydrators are operating (with an allowance for downtime for maintenance and/or repair). These restrictions were proposed to limit the potential to emit of the dehydrators below major source levels and Texas Gas is requesting that these restrictions be incorporated into the general permit. In addition, Texas Gas proposed operating hours restrictions for three of the engines at our Slaughters station. In a subsequent permit application, we proposed removal of these restrictions when reciprocating Engines #1 - #4 at the station are replaced with two low NOX reciprocating engines. However, Texas Gas is requesting that these restrictions apply until the construction project is complete (late 1998). Attachment 1 provides proposed language to be included in the general permit to address these situations.

Response: This comment was not addressed in the permit.

5. Texas Gas has two comments related to the sulfur dioxide standards found in the NSPS for gas turbine (40 CFR 60, Sub part GG). First, 40 CFR 60.333 states that sources must comply with either the 0.015 vol% SO₂ standard or the 0.8 wt% fuel sulfur content requirement. However, Section B[6](1) of the draft general permit states that sources must comply with both standards and it appears that this should be corrected. Additionally, Texas Gas has received approval from EPA, Region 4 to use an alternate test method for determining the fuel sulfur content for our NSPS turbines in Kentucky. Section B[6](3) of determining the fuel sulfur content for our NSPS turbines in Kentucky. Section B[6](3) of the draft permit should be revised to allow sources to use the ASTM methods listed in 40 CFR 60.335(d) or any alternate test methods approved by the Administrator.

Response: This comment has been incorporated into the permit.

6. Finally, Texas Gas would like to offer several minor comments on the draft general permit:
 - a) Section E.1 requires each station to record the amount of natural gas processed (if applicable) and the amount of natural gas burned on a monthly basis and report this data to the Division on an annual basis. There are not applicable regulations that specifically require this data and it does not appear useful in determining a station's compliance status with the terms and conditions of the permit. Therefore, Texas Gas feels that this represents an unnecessary burden and is requesting that this requirement be removed from the permit.

Response: This comment was not incorporated into the permit.

- (b) Compressor Turbine #2 at our Hardinsburg station has a rated heat input greater than 100 MMBtu/hr and the draft general permit does not specifically address any turbine over this rating. Section B[5] should be revised to cover any size turbine that was constructed prior to October 3, 1977. For turbines installed prior to this date, the requirements are the same regardless of the turbine's rated heat input capacity. Turbines greater than 100 MMBtu/hr installed or modified after October 3, 1977, are also not covered by the permit; however, Texas Gas does not currently have any turbines meeting these criteria and it is not an immediate concern.

Response: This comment has been incorporated into the permit.

- (c) Section B[6](2) erroneously states that the equation for determining compliance with the NO_x standard in the NSPS for gas turbines is found in 40 CFR 60.335(b)(1). The equation is actually found in 40 CFR 60.335(c)(1).

Response: This comment has been incorporated into the permit.

- (d) Sections B[-5](8)(a) and B[6](8)(a) refer to "optimum engine performance" but should refer to "optimum turbine performance". Additionally, Section B[07](8)(a) refers to "optimum engine performance" but should refer to "optimum dehydrator performance".

Response: This comment has been incorporated into the permit.

- (e) Section F(d)(2) states that all notifications related to construction progress be sent to the Florence Regional Office as well as the Central Office. Texas Gas wanted to verify that this was the intent of the Division and was not an error.

Response: The permit has been modified to have notification sent to the Regional Office under whose purview the source is located.

- (f) Section E.5 states that Section H of the general permit contains the compliance schedule provisions. These are actually found in Section G of the draft permit.

Response: The permit has been changed. Compliance schedule provisions are under Section I.

- (g) There is a typographical error in Section B[1](2).

Response: The permit has been corrected.

SOURCE COMMENTS - EL PASO ENERGY - Douglas M. Jordan - September 19, 1997

1. Specific Record keeping Requirements: By reference to Section E. Condition 1, KDEP is requiring that the quantity of fuel burned by these sources be recorded, maintained, and reported to the Department on an annual basis. KDEP also requires that records of changes to unit operations or equipment be maintained. TGP requests that Section B, Condition 5 be revised to **NA** natural gas fired reciprocating compressor engines and standby generator engines not subject to an emissions limitation (as identified under Applicable Regulations 2. Emissions Limitations).

Response: This comment has not been incorporated into the permit.

2. TGP's basis for this request is that units not submit to an emissions limitation should not be subject to monitoring, record keeping, and reporting requirements. By requiring facilities to maintain records of fuel use and operational changes, KDEP is imposing new substantive requirements (fuel use monitoring) on the source. Although TGP meters the fuel use on a compressor building basis, it is not standard for TGP engines to be equipped with individual fuel meters. Also, unless changes to the unit operators or equipment result in an emissions increase (and hence KDEP permit requirements) the source should not be subject to record keeping and reporting requirements.

Response: Sources are not required to meet requirements for units not subject to applicable requirements.

3. **Specific Record Keeping Requirements:** By reference to Section E, Condition 1, KDEP is requiring that the quantity of fuel burned by these sources be recorded, maintained, and reported to the Department on an annual basis. KDEP also requires that records of changes to unit operations or equipment be maintained. TGP requests that Section B, Condition 5 be revised to **NA** for natural gas fired turbines with a rated heat input greater than 10 MMBtu/hr but less than 100 MMBtu/h and constructed before October 3, 1977.

TGP's basis for this request is that units not subject to an emissions limitation should not be subject to record keeping and reporting requirements. By requiring facilities to maintain records of fuel use and operational changes, KDEP is imposing new substantive requirements (fuel use monitoring) on the source. Although TGP meters the fuel use on a compressor building basis, it is not standard for TGP turbines to be equipped with individual fuel meters. Also, unless the changes to the unit operations or equipment result in an emissions increase (and hence KDEP permit requirements) the source should not be subject to record keeping and reporting requirements.

Response: Refer to response above.

4. **Storage Tanks [?]:** In reviewing the General Operating Permit, TGP noticed that a GOP has not been prepared for storage tanks. Storage tanks that may be subject to Federal and State regulations used at natural gas transmissions facilities include gasoline and condensate storage tanks. KDEP should consider completing GOPs for these sources or a station specific Title V permit may be required for sources subject to underlying applicable requirements.

Response: This comment has been incorporated into the permit.

5. **SECTION C - INSIGNIFICANT SOURCES:** In reviewing the listed "Insignificant Activities" under Section C of the General Operating Permit, TGP observed that additional items commonly present at natural gas compression and transmission stations are not included> Some of these items include storage tanks not subject to applicable requirements due to capacity, throughput or material storage and small vapor degreasers. TGP suggests that in addition to the listed items, KDEP extends the insignificant activities list to include other insignificant activities not listed but which meet the criteria for insignificant sources pursuant to 401 KAR 50:035.

Response: The Insignificant Activities list in Section C has been modified but is not intended to be all inclusive, other activities may qualify, provided they meet the criterion under 401 KAR 50:035, Section 5(4).

6. **SECTION E - MONITORING, RECORD KEEPING, AND REPORTING-Condition 1:** TGP requests that the provisions of Section E, Condition 1 be redrafted to "generically" address monitoring, record keeping, and reporting requirements. TGP proposes language similar to the following:

"The permittee shall monitor the parameters as indicated in Section B, Condition 4. The permittee shall maintain copies of the records at the source or alternate source, upon Division approval, for a period of five years. The records shall be made available for inspection upon request by a duly authorized representative of the Division for Air Quality. Records of the monitoring parameters shall be submitted to the Division on an annual basis with the annual compliance certification as required by Section E, Condition 5".

Response: The comment has been incorporated into the permit.

7. **SECTION E - MONITORING, RECORD KEEPING, AND REPORTING (Cont.) - Condition 5:** TGP requests that the Division for Air Quality considers establishing a common annual date for filing the annual compliance certification. This request is made to minimize the burden imposed on companies with several facilities and varying permit issuance dates. TGP suggests that the Division consider establishing the annual date to follow the submittal date of the annual emissions inventory as the inventory may serve as a tool for assessing facility compliance. TGP wishes to note that at least two states, Louisiana and Mississippi, have established a common annual certification date for all sources located within the state.

Response: This comment has been incorporated into the permit.

8. **SECTION F - GENERAL CONDITIONS:** TGP requests that KDEP expand the coverage of Condition f) Emergency Provisions, Provision 4. To include the "temporary" replacement of compressor engines and turbines during routine maintenance activities. This request is made to allow the use of portable units to provide continued gas delivery when the mainline compressor engines and turbines must be taken off-line for servicing.

TGP requests that Condition f), Provision 4, Item b. (total operating capacity) be revised to incorporate a net emissions reduction option. This request is made in order to provide flexibility in the portable compressor to be used on a temporary basis. This provision also results in a benefit to the environment. TGP proposes language similar to the following:

- b) The total operating capacity of the temporary units shall not exceed the capacity of the replaced unit, or

Net emissions that occur during operation of the portable compressor are less than the emissions that would occur during "original" unit operations facilities may take other units off line to ensure net emissions are not increased.

- 1) Emission rates of nitrogen oxides, carbon monoxides, and sulfur dioxides for the portable compressor and mainline compressor (s). Emissions rates can be based on test data, manufacturer data, AP-42 factors, and engineering estimates,
- 2) Operating hours and fuel use of the portable compressor,
- 3) Calculated net emissions reductions that occurred during the interim use period.

Response: This comment has been incorporated into the permit.

9. TGP also requests that the Department includes a permit condition allowing “in-kind” replacement of turbine components. This request is made to allow natural gas transmission facilities to employ industry standard of practice to replace components of the turbine package. TGP suggests language similar to the following:

I) Turbine Component In-Kind Replacement

1. The permittee shall be allowed to conduct in-kind replacement of turbine components as part of normal maintenance, repair, and replacement activities. However, the replacement activities shall not result in increasing the units base horsepower or increasing the emissions of the unit. The facility shall maintain records of the replacement activities. This provision does not apply to modifications which constitute reconstruction pursuant to 40 CFR Part 60 requirements.

Response: This comment has not been incorporated into the permit.

10. **ATTACHMENT C - SUMMARY OF SOURCE SPECIFIC APPLICABLE REQUIREMENTS AND EMISSION POINTS:** TGP has reviewed Attachment C and concurs that it may be a good tool for listing the units and underlying applicable requirements. However, TGP proposes the KDEP complete the attachment based on the representations made in the completed Title V permit applications. KDEP could require that the form be initially completed by the applicant when filing a General Operating Permit application.

Response: This comment has not been incorporated into the permit, Attachment C is provided solely for the permittee’s internal use. The Division will provide a copy of the sources EIS which indicates the affected facilities.

1. **SECTION B - EMISSIONS POINTS, AFFECTED FACILITIES, APPLICABLE REQUIREMENTS AND OPERATING CONDITIONS:** TGP requests that the agency revise Section B, Condition 5 (Record Keeping) and Condition 6 (Reporting) to **NA** for units not subject to an underlying standard (permit limit) as identified in Section B, Conditions 1 (operating limitations), 2 (emission limitations), and 4 (monitoring requirements). Units subject to an underlying permit limit or standard should continue to be subject to the requirements of Section E, Conditions 1 and 6 to satisfy the periodic monitoring provisions of Title V regulations.

Requiring units to meet the requirements of Section E, Conditions 1 and 6 imposes additional monitoring, record keeping, and reporting on units not subject to an underlying standard. In addition, requiring units not subject to an underlying standard to comply with these conditions imposes federally enforceable requirements on the sources as the General Permit and its conditions are federally enforceable.

Response: Refer to response to El Paso Energy Comment 1 September 19, 1997.

TGP facilities monitor the fuel usage of units for the purpose of ensuring energy efficient and cost effective operations. However, in most cases, TGP monitors the fuel consumption on a per building basis and then calculates the fuel consumption on a per unit basis. Fuel consumption rates are maintained on a centralized database which can be readily accessed by Station personnel. Imposing the monitoring and record keeping requirements of Section E, Condition 1 as written would entail the installation of additional fuel meters on the units and require maintenance of additional records at the facility.

Response: This comment has not been incorporated in the permit.

2. **SECTION F - GENERAL CONDITION:** TGP requests that the agency revise Section F, Condition 4, Item b to incorporate a “net emissions reduction” option. This request is made in order to provide flexibility in the portable compressor engine/turbine to be used on a temporary basis and to facilitate station operational requirements. TGP proposes the following permit language:

- b) The total operating capacity of the temporary unit (s) shall not exceed the capacity of the replaced unit, or

Net emissions that occur during the operation of the temporary unit (s) shall be less than the emissions that would occur during operation of the unit (s) prior to the upset. Facilities may take additional units offline during operation of the temporary unit to satisfy the net emissions reduction requirement. To demonstrate that net emissions reductions occurred during the use of the temporary unit (s), the facility shall record the following information:

- 1. Operating hours and fuel use of the temporary unit (s) and other units taken off line during the temporary period; and*
- 2. Calculated net emissions reductions that occurred during the use of the temporary unit (s). Emissions calculations can be based on test data, manufacturer data, AP-42 factors, and engineering estimates.*

Response: This comment has been incorporated into the permit.

3. In some cases, the temporary unit available for use during an upset condition may be larger (horsepower) than the upset unit. Therefore, limiting the temporary unit to being smaller than the upset unit may restrict a facility from responding during an upset. In addition, if the temporary unit exhibits different operational characteristics (e.g. horsepower) than the upset unit it may be necessary to take additional units offline for operational considerations (e.g. horsepower) than the upset unit it may be necessary to take additional units offline for operational considerations (e.g. system balance). These issues support expanding the current provisions of Section F, Condition 4, item b.

Response: This comment has been incorporated into the permit.

4. TGP also requests that the agency includes a permit condition allowing “in-kind” replacement of turbine components (e.g. gas producer section, power turbine section, etc.). This request is made to allow natural gas transmission facilities to employ industry standard of practice to replace components of the turbine as a function of maintenance activities and upset conditions. TGP suggests language similar to the following:

I) Turbine Component In-Kind Replacement

- 1. The permittee shall be allowed to conduct in-kind replacement of turbine components as part*

of normal maintenance, repair, and replacement activities. However, the replacement activities shall not result in increasing the emissions of the unit. The facility shall maintain records of the replacement activities. This provision does not apply to modifications which constitute reconstruction pursuant to 40 CFR Part 60 requirements.

Response: This comment has not been incorporated into the permit.

1. The term "alter" should be deleted from the second paragraph on the page 1 of 28. Under 401 KAR 50.035 Section 3(4), an "alteration" is no longer a potential trigger of a requirement to obtain a permit revision or permit modification.

Response: This change has been made.

2. Compressor blow-down should be added to the list of insignificant activities in Section C on page 15 of 28.

Response: This activity has been included in Section C Insignificant Activities

3. Condition 1 in Section E requires the permittee to record the amount of natural gas processed, if applicable. This requirement does not seem to serve any purpose and does not figure into the calculations the DAQ uses to calculate the point source emissions from natural gas transmission stations.

Response: The comment has been incorporated into the permit.

4. Condition 4 of Section E would require notification by telephone "as promptly as possible" upon learning of the deviation from permitting requirements. However, 401 KAR 50:035 Section 7(1)(e) requires "Prompt reporting of the deviations from the permit requirements. Requiring permit deviations to be reported as promptly "as possible" is more stringent than provided for under the regulation.

Response: The comment has been incorporated into the permit.

5. Condition 5(e) in Section E on page 17 of 28 provides for compliance certifications to include other facts the Division may require to determine the compliance status of the source." This appears to be an open-ended condition. Facts that are necessary to determine compliance status are already referenced in Section B of the permit. Subparagraph (e) should, therefore, be deleted since it is vague and non-descriptive as to specific facts that are necessary for compliance certifications.

Response: The comment has been incorporated into the permit.

6. Condition 6 in Section E on page 17 of 28 relating to reporting information necessary to determine subject emissions should be clarified to indicate when that information needs to be submitted by the permittee. That would eliminate the need to review the regulation to determine the appropriate submittal date.

Response: The comment has been incorporated into the permit.

7. Note 1 in Condition 6 in Section E on page 18 of 29 provides that "the permitting authority may require other facts beyond items a-d of condition #5 to determine the compliance status of the source." This appears to be an open-ended condition. Note 1 in Condition 6 should, therefore be deleted since it is vague and non-descriptive as to specific facts that are necessary for compliance certifications.

Response: The comment has been incorporated into the permit.

8. Condition 7 in Section E on page 18 of 28 should contain a reference to the development and implementation of a routine operation and maintenance program as referenced in Section B in the permit. That is necessary to ensure that both provisions relating to state air toxics are construed in a consistent manner. It should be clearly stated that it is not necessary to run an air emission dispersion model for a compressor station site if a routine operation and maintenance program is in effect.

Response: The permit requires the source to propose RACT or BACT if required. The division believes that a good routine operation and maintenance plan will be satisfactory.

9. Condition 5 on page 19 of 28 is ambiguous with the respect to the reference to MACT standards. Those standards will not be available before issuance of the draft permit. This condition needs to be clarified.

Response: The comment has been incorporated into the permit.

10. The condition relating to transfers of permits requires 30 days advance notices to be given. See page 21 of 28. However, 401 KAR 50:035 Section 13(2) does not specify a requirement for 30 days advanced notice. Therefore, the condition seems more stringent than would otherwise be required by regulation.

Response: The comment has been incorporated into the permit.

11. The condition relating to preparation of risk management plans on page 23 of 28 should be revised to read: "If required by law or regulation the permittee shall comply with..." The phrase "if required" standing alone, is too vague.

Response: The comment has not been incorporated into the permit

12. Condition 1 in Section G on page 24 of 28 requires any necessary flow monitoring equipment to be installed within 30 days of issuance of the permit. Even though exceptions are available on a case-by-case basis, a longer period would appear to be more appropriate to account for ordering and scheduling of installation of equipment. Ninety days would be a more appropriate time period for the initial installation of the flow monitoring equipment.

Response: Section I - Compliance Schedule allows 30 day to purchase equipment and 60 days to complete installation from the issuance of the permit.